

**WHAT IS CLAIMED IS:**

1. A vitamin D analog compound selected from the group consisting of (4E,6E)-7-{3-[2-(3,4-bis-hydroxymethylphenyl)-ethyl] phenyl}-3-ethylnona-4,6-dien-3-ol, (E)-6-[3-(3,4-bis-hydroxymethylbenzyloxy)phenyl]-1,1,1-trifluoro-2-trifluoromethyloct-5-en-3-yn-2-ol, (3E,5E)-6-[3-(3,4-bis-hydroxymethylbenzyloxy)-phenyl]-1,1,1-trifluoro-2-trifluoromethylocta-3,5-dien-2-ol, (E)-6-{3-[2-(3,4-bis-hydroxymethylphenyl)ethyl]-phenyl}-1,1,1-trifluoro-2-trifluoromethyloct-5-en-3-yn-2-ol, and (3E,5E)-6-{3-[2-(3,4-bis-hydroxymethylphenyl)-ethyl] phenyl}-1,1,1-trifluoro-2-trifluoromethylocta-3,5-dien-2-ol, and the geometric isomers thereof and these compounds in which one or more of the hydroxyl functions are protected by a protective group  $-(C=O)-R$ , in which R is a linear or branched alkyl radical having from 1 to 6 carbon atoms, an aryl radical having from 6 to 10 carbon atoms, or an aralkyl radical having from 7 to 11 carbon atoms, the aryl radical or the aralkyl radical optionally being mono- or disubstituted by a hydroxy group, an alkoxy radical having from 1 to 3 carbon atoms, a halogen atom, a nitro function or by an amino function, and mixtures thereof.
2. The vitamin D analog compound as defined by Claim 1, comprising at least one protective group  $-(C=O)-R$ , in which R is a methyl, ethyl, isopropyl, tert-butyl or hexyl radical.
3. The vitamin D analog compound as defined by Claim 1, comprising at least one protective group  $-(C=O)-R$ , in which R is a phenyl or naphthyl radical.
4. The vitamin D analog compound as defined by Claim 1, comprising at least one protective group  $-(C=O)-R$ , in which R is a benzyl or methylnaphthyl radical.

5. The vitamin D analog compound as defined by Claim 1, comprising at least one protective group  $-(C=O)-R$ , in which R is a fluorine, bromine or chlorine atom.
- 5 6. A pharmaceutical composition comprising an effective cell proliferation and differentiation affecting amount of at least one vitamin D analog compound as defined by Claim 1, formulated into a pharmaceutically acceptable support therefor.
- 10 7. The pharmaceutical composition as defined by Claim 6, further comprising at least one retinoid, corticosteroid, estrogen, antioxidant,  $\alpha$ -hydroxy acid,  $\beta$ -hydroxy acid,  $\alpha$ -keto acid or derivative thereof, ion channel blocker, immune system affecting active agent, or mixture thereof.
- 15 8. The pharmaceutical composition as defined by Claim 6, said at least one vitamin D analog compound comprising from 0.0001% to 5% by weight thereof.
9. The pharmaceutical composition as defined by Claim 6, formulated as tablets, capsules, a syrup, a suspension, a powder, granules, an emulsion, 20 micropheres, nanospheres, controlled release lipid vesicles or polymers, a solution, a salve, a cream, a milk, an ointment, a lotion, a gel, a spray, or a swab.
10. A cosmetic composition comprising a skin/hair cosmetically effective amount of at least one vitamin D analog compound as defined by Claim 1, 25 formulated into a cosmetically acceptable support therefor.
11. The cosmetic composition as defined by Claim 10, further comprising at least one retinoid, corticosteroid, antioxidant,  $\alpha$ -hydroxy or  $\alpha$ -keto acid or derivative thereof, ion channel blocker, or mixture thereof.

12. The cosmetic composition as defined by Claim 10, said at least one vitamin D analog compound comprising from 0.001 % to 3 % by weight thereof.

13. The cosmetic composition as defined by Claim 10, formulated as a cream,  
5 a lotion, a gel, microspheres, nanospheres, lipid or polymer vesicles, a soap, or a shampoo.

14. A regime or regimen for influencing the transactivation of vitamin D response elements in an individual in need of such treatment, comprising  
10 administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

15. A regime or regimen for treating a dermatological complaint, condition or affliction associated with a keratinization disorder, on an individual in need of  
15 such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

16. A regime or regimen for treating ichthyosis, an ichthyosiform state, Darrier's syndrome, palmoplantar keratoderma, leucoplasia, a leucoplasiform  
20 state, or cutaneous or mucous (buccal) lichen, on an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

17. A regime or regimen for treating a dermatological complaint, condition or  
25 affliction having an inflammatory immunoallergic component, on an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

18. A regime or regimen for treating dermal or epidermal proliferation, on an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

5 19. A regime or regimen for treating an immune dermatosis, on an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

10 20. A regime or regimen for treating a dermatological or general complaint, condition or affliction having an immunological component on an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

15 21. A regime or regimen for treating a sebaceous function disorder, on an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

20 22. A regime or regimen for treating a cutaneous disorder caused by UV radiation, or aging of the skin, on an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

25 23. A regime or regimen for treating a cicatrization disorder or stretch marks, on an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

24. A regime or regimen for treating an inflammatory complaint, condition or affliction, on an individual in need of such treatment, comprising administering to

such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

25. A regime or regimen for treating an ophthalmological complaint, condition  
5 or affliction, on an individual in need of such treatment, comprising administering  
to such individual, a thus effective amount of the pharmaceutical composition as  
defined by Claim 6.

26. A regime or regimen for treating a cancerous or precancerous state having  
10 or being induced by vitamin D receptors, on an individual in need of such  
treatment, comprising administering to such individual, a thus effective amount of  
the pharmaceutical composition as defined by Claim 6.

27. A regime or regimen for treating alopecia, on an individual in need of such  
15 treatment, comprising administering to such individual, a thus effective amount of  
the pharmaceutical composition as defined by Claim 6.

28. A regime or regimen for treating an immune complaint, condition or  
affliction, on an individual in need of such treatment, comprising administering to  
20 such individual, a thus effective amount of the pharmaceutical composition as  
defined by Claim 6.

29. A regime or regimen for treating an endocrine complaint, condition or  
affliction, on or in an individual in need of such treatment, comprising  
25 administering to such individual, a thus effective amount of the pharmaceutical  
composition as defined by Claim 6.

30. A regime or regimen for treating abnormal management of intracellular  
calcium, or a calcium metabolism pathology, on or in an individual in need of

such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

5        31.     A regime or regimen for treating a vitamin D deficiency, or a disorder of the homeostasis of minerals in the plasma and the bones, on or in an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

10       32.     A regime or regimen for treating a complaint, condition or affliction of the cardiovascular system, in an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.

15       33.     A regime or regimen for treating non-insulin-dependant diabetes, in an individual in need of such treatment, comprising administering to such individual, a thus effective amount of the pharmaceutical composition as defined by Claim 6.